

DETAILED ACTION

Response to Amendment

1. In response to the office action from 7/7/2009, the applicant has submitted an amendment, filed 10/7/2009 amending independent claims 1, 7, 9, 15, 17, 20, 23, 25, and 28, while arguing to traverse the art rejection based on the limitation regarding identifying a hands-free set including its type and model (*Amendment, Pages 11-17*). Applicant's arguments have been fully considered, but are moot with respect to the new grounds of rejection, necessitated by the amended claims and further in view of Haller et al (*U.S. Patent: 6,845,097*).

2. In regards to the claim objections directed towards claims 5 and 13, the applicant argues that the amendments to independent claims 1 and 9 (*i.e., a type and model corresponds to hands-free set*) clarifies that the pairing codes specific to a particular wireless device further limits the scope of these independent claims (*Amendment, Page 9*). Considering the amended claims and the associated arguments, the examiner notes that the independent claims do set forth a more general model-based hands-free set pairing code, while claims 5 and 13 notes that this code is further for a specific user's hands-free set. It is noted, however, that claims 5 and 13 recite "the wireless device" which, based on the applicant's arguments appears to be the second wireless device or hands-free set, but in the claims this recitation refers to the first device's code. An objection to this effect has been set forth below.

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3. With respect to the previous 35 U.S.C. 112, first paragraph rejection directed towards claims 1-8, the applicant argues that paragraphs 0025, 0033, and 0048 of the specification (*paragraph numbering is from 2005/0010417 A1 not the originally filed specification*) teach that speech recognition logic and pairing information searching may be located at any network element, which includes a wireless device (*Amendment, Pages 9-10*). The examiner has considered these specification citations and finds that the specification does appear to support this functionality located at a network element in the form of a wireless device. As such the previous corresponding 35 U.S.C. 112, first paragraph rejection has been withdrawn.

4. In response to amended claims 1, 7, 9, and 15, which now include a memory coupled to the claimed processor (*Amendment, Page 10*), the examiner notes that there is no longer a gap between claim elements and the previous 35 U.S.C. 112, second paragraph rejection has been withdrawn. It is noted, however, these claims state that the logic is "on the memory". Such language is grammatically unclear, and thus, a claim objection to this effect has been set forth below.

Response to Arguments

5. Applicant's arguments have been fully considered, but are moot with respect to the new grounds of rejection, necessitated by the amended claims and further in view of Haller et al (*U.S. Patent: 6,845,097*). Also, in response to the applicant's arguments that no motivation to combine the prior art of record has been provided (*Amendment, Pages 14-15*), the examiner

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notes that such motivation is provided by the Wiley et al reference, the Asano et al reference, and the Haller et al reference (see Prior OA, Page 14, "to diminish the threat of a man-in-the-middle attack", Page 15, "to maintain interoperability between similar devices", and Pages 15-16, "to provide a well-known alternative command type to a voice command that is capable of accessing a device pairing message over a telephone network"). Thus, the applicant's arguments have been fully considered, but are not convincing.

Claim Objections

6. **Claims 1-16** are objected to because of the following informalities:

Claims 1, 7, 9, and 15 recite that logic is "on the memory". Such language is grammatically unclear. The claims will be interpreted that the logic is --stored in the memory-- for the application of the prior art of record.

In claims 5 and 13, it is uncertain whether the "pairing information" specific to "the wireless device" is referring to the first wireless device or the second hands-free set pairing information. Based on the applicants' comments (*Amendment, Page 9*) and the limitations set forth in parent claim 1, it would appear that "the pairing information" is directed to that of the second hands-free set because that device is the one that is desired to be paired with "the wireless device" of claims 1 and 9. These claims will be considered accordingly for the application of the prior art of record. Likewise, as a result of the claim amendments to claims 1 and 9, it is unclear which pairing information is referred to in claims 2-4 and 10-12 (*i.e., the first wireless device or the hands-free set*).

The remaining dependent claims fail to overcome the objections of their aforementioned parent claims, and thus, are also objected to by virtue of their dependency.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-2, 5-7, 9-10, 13-15, 17-18, 20-21, 23, 25-28, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (*U.S. Patent Application Publication: 2002/0065663*) in view of Haller et al (*U.S. Patent: 6,845,097*).

With respect to **Claim 1**, Thomas recites:

Pairing information for a first wireless device (*address of another device stored in a memory register, Paragraph 0020; and pairing message received from another device, Paragraph 0022*);

Pairing information for another wireless device (*address stored in a memory register to be sent to another device for establishing a link, Paragraph 0020*);

A processor in communication with the memory (*system processor is in communication with the storage means, Paragraph 0026*) coupled to the wireless device (*Speech synthesis address generation processor Fig. 7, Element 12*);

A speaker coupled to the processor to communicate audible signals (*Fig. 7, Element 13*);
and

Logic which, in communication processor, converts the pairing information for the other wireless device to audible signals, and communicates the audible signals to be communicated via the speaker (*reading and synthesizing a device address stored in a memory register, Paragraph 0020*).

Although Thomas accepts vocal inputs to enable wireless device pairing, further teaches a memory that holds multiple pairing addresses (*Paragraph 0026*), and mentions that his invention can be used with other types of pairing information (*Paragraph 0032*), Thomas does not make a link between a identifying pairing information based upon a hands-free set type and model or specifically teach encryption codes associated with the hands-free set. Haller, however, recites a system that pairs wireless devices having processors/memories (*Col. 4, Lines 39-63*) including hand-free set type devices (*for example, elements 107a and 107c, Fig. 1*) (*Abstract, Col. 5, Lines 19-40 and Col. 6, Lines 5-21*). Further, Haller's pairing key includes and is selected for a type (*device model, manufacturer*) and model (*device name, device identification symbol*) of a hands-free set (*Col. 2, Lines 41-51, Col. 6, Lines 65- Col. 7, Line 30*).

Thomas and Haller are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas with the manufacture

numbers for hands-free sets taught by Haller in order to efficiently and easily add/remove specific devices from a short distance wireless network (*Haller, Col. 2, Lines 7-10*).

With respect to **Claim 2**, Thomas further discloses:

Logic which, when applied to the processor, performs acts defined by the pairing information for the wireless device (*converting address data to speech using a vocabulary and receiving a pairing message from a second device, Paragraph 0020*).

With respect to **Claim 5**, Haller further discloses:

A pairing code specific to the wireless device (*Col. 2, Lines 41-51*).

With respect to **Claims 6 and 14**, Haller further recites:

Device pairing codes in the form of DTMF tones (*Col. 6, Lines 22-37*).

With respect to **Claim 7**, Thomas discloses:

A microphone (*Fig. 7, Element 14*);

A processor (*speech recognition processor, Paragraph 0022*); and

Logic which, in communication with the processor, converts signals produced by the microphone into control signals, and applies the control signals to effect pairing of the wireless device with another device (*converting a device address to a control signal to enable device pairing, Paragraph 0022*).

Although Thomas accepts vocal inputs to enable wireless device pairing, further teaches a memory that holds multiple pairing addresses (*Paragraph 0026*), and mentions that his invention can be used with other types of pairing information (*Paragraph 0032*), Thomas does not make a link between a identifying pairing information based upon a hands-free set type and

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model or specifically teach encryption codes associated with the hands-free set. Haller, however, recites a system that pairs wireless devices having processors/memories (*Col. 4, Lines 39-63*) including hand-free set type devices (*for example, elements 107a and 107c, Fig. 1*) (*Abstract, Col. 5, Lines 19-40 and Col. 6, Lines 5-21*). Further, Haller's pairing key includes and is selected for a type (*device model, manufacturer*) and model (*device name, device identification symbol*) of a hands-free set (*Col. 2, Lines 41-51, Col. 6, Lines 65- Col. 7, Line 30*).

Thomas and Haller are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas with the manufacture numbers for hands-free sets taught by Haller in order to efficiently and easily add/remove specific devices from a short distance wireless network (*Haller, Col. 2, Lines 7-10*).

With respect to **Claim 9**, Thomas recites:

A processor (*Speech synthesis address generation processor Fig. 7, Element 13*);

A memory in communication with the processor (*system processor is in communication with the storage means, Paragraph 0026*);

A speaker coupled to the processor to communicate audible signals (*Fig. 7, Element 13*);
and

Logic stored in the memory which, when applied to the processor, identifies a second wireless device to a network, requests pairing information, and receives and converts the pairing information for the other wireless device to audible signals, and communicates the audible signals via the speaker (*reading and synthesizing a device address stored in a memory register,*

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Paragraph 0020; and requesting and receiving pairing information over a wireless network, Paragraph 0028).

Although Thomas accepts vocal inputs to enable wireless device pairing, further teaches a memory that holds multiple pairing addresses (*Paragraph 0026*), and mentions that his invention can be used with other types of pairing information (*Paragraph 0032*), Thomas does not make a link between a identifying pairing information based upon a hands-free set type and model or specifically teach encryption codes associated with the hands-free set. Haller, however, recites a system that pairs wireless devices having processors/memories (*Col. 4, Lines 39-63*) including hand-free set type devices (*for example, elements 107a and 107c, Fig. 1*) (*Abstract, Col. 5, Lines 19-40 and Col. 6, Lines 5-21*). Further, Haller's pairing key includes and is selected for a type (*device model, manufacturer*) and model (*device name, device identification symbol*) of a hands-free set (*Col. 2, Lines 41-51, Col. 6, Lines 65- Col. 7, Line 30*).

Thomas and Haller are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas with the manufacture numbers for hands-free sets taught by Haller in order to efficiently and easily add/remove specific devices from a short distance wireless network (*Haller, Col. 2, Lines 7-10*).

With respect to **Claim 10**, Thomas further discloses:

Logic which, when applied to the processor, performs acts defined by the pairing information for the wireless device (*converting address data to speech using a vocabulary and receiving a pairing message from a second device, Paragraph 0020*).

Claim 13 contains subject matter similar to Claim 5, and thus, is rejected under similar rationale.

With respect to **Claim 15**, Thomas recites:

A microphone (*Fig. 7, Element 14*);

A processor (*speech recognition processor, Paragraph 0022*);

A memory in communication with the processor (*system processor is in communication with the storage means, Paragraph 0026*); and

Logic which, when applied to the processor, converts signals produced by the microphone into control signals, communicates the speech signals to the network, receives control signals from the network and applies the control signals to effect pairing of the wireless device with another device (*converting a device address to a control signal to enable device pairing, Paragraph 0022; and pairing information is sent over a wireless network, Paragraph 0028*).

Although Thomas accepts vocal inputs to enable wireless device pairing, further teaches a memory that holds multiple pairing addresses (*Paragraph 0026*), and mentions that his invention can be used with other types of pairing information (*Paragraph 0032*), Thomas does not make a link between a identifying pairing information based upon a hands-free set type and model or specifically teach encryption codes associated with the hands-free set. Haller, however, recites a system that pairs wireless devices having processors/memories (*Col. 4, Lines 39-63*) including hand-free set type devices (*for example, elements 107a and 107c, Fig. 1*) (*Abstract, Col. 5, Lines 19-40 and Col. 6, Lines 5-21*). Further, Haller's pairing key includes and is selected

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for a type (*device model, manufacturer*) and model (*device name, device identification symbol*) of a hands-free set (*Col. 2, Lines 41-51, Col. 6, Lines 65- Col. 7, Line 30*).

Thomas and Haller are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas with the manufacture numbers for hands-free sets taught by Haller in order to efficiently and easily add/remove specific devices from a short distance wireless network (*Haller, Col. 2, Lines 7-10*).

With respect to **Claim 17**, Thomas recites:

First wireless device converting pairing information for a second wireless device into audible signals and the first wireless device communicating the audible signals to the second wireless device (*speech synthesis of pairing information and speech output via a speaker, Paragraphs 0020 and 0030*);

The second wireless device converting the audible signals into control signals and the second wireless device applying the control signals to effect pairing with the first wireless device (*speech recognition of pairing data and control signal generation, Paragraphs 0022 and 0030*).

Although Thomas accepts vocal inputs to enable wireless device pairing, further teaches a memory that holds multiple pairing addresses (*Paragraph 0026*), and mentions that his invention can be used with other types of pairing information (*Paragraph 0032*), Thomas does not make a link between a identifying pairing information based upon a hands-free set type and model or specifically teach encryption codes associated with the hands-free set. Haller, however, recites a system that pairs wireless devices having processors/memories (*Col. 4, Lines 39-63*) including hand-free set type devices (*for example, elements 107a and 107c, Fig. 1*) (*Abstract*,

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Col. 5, Lines 19-40 and Col. 6, Lines 5-21). Further, Haller's pairing key includes and is selected for a type (*device model, manufacturer*) and model (*device name, device identification symbol*) of a hands-free set (*Col. 2, Lines 41-51, Col. 6, Lines 65- Col. 7, Line 30*).

Thomas and Haller are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas with the manufacture numbers for hands-free sets taught by Haller in order to efficiently and easily add/remove specific devices from a short distance wireless network (*Haller, Col. 2, Lines 7-10*).

With respect to **Claim 18**, Thomas discloses the speech recognition processing as applied to Claim 17.

With respect to **Claim 20**, Thomas recites:

A processor (*Speech synthesis address generation processor Fig. 7, Element 13*);

A speaker (*Fig. 7, Element 13*); and

Logic which, when applied to the processor, converts the pairing information for the other wireless device to audible signals, and communicates the audible signals via the speaker to effect wireless device pairing (*reading and synthesizing a device address stored in a memory register, Paragraph 0020-22*).

Thomas also teaches that pairing information is sent over a wireless network (*Paragraph 0028*).

Although Thomas accepts vocal inputs to enable wireless device pairing, further teaches a memory that holds multiple pairing addresses (*Paragraph 0026*), and mentions that his invention can be used with other types of pairing information (*Paragraph 0032*), Thomas does

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not make a link between a identifying pairing information based upon a hands-free set type and model or specifically teach encryption codes associated with the hands-free set. Haller, however, recites a system that pairs wireless devices having processors/memories (*Col. 4, Lines 39-63*) including hand-free set type devices (*for example, elements 107a and 107c, Fig. 1*) (*Abstract, Col. 5, Lines 19-40 and Col. 6, Lines 5-21*). Further, Haller's pairing key includes and is selected for a type (*device model, manufacturer*) and model (*device name, device identification symbol*) of a hands-free set (*Col. 2, Lines 41-51, Col. 6, Lines 65- Col. 7, Line 30*).

Thomas and Haller are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas with the manufacture numbers for hands-free sets taught by Haller in order to efficiently and easily add/remove specific devices from a short distance wireless network (*Haller, Col. 2, Lines 7-10*).

With respect to **Claim 21**, Thomas discloses the speech recognition processing as applied to Claim 17.

Claim 23 contains subject matter similar to Claims 20-21, and thus, is rejected for the same reasons.

Claim 25 contains subject matter similar to Claim 15, and thus, is rejected for the same reasons.

With respect to **Claim 26**, Thomas further recites a response message sent by a wireless device to affect device pairing (*Paragraph 0022*) while Haller teaches the hands-free sets as applied to claim 20.

With respect to **Claim 27**, it is within the scope of the teachings of Thomas to incorporate speech synthesis/recognition capabilities in both devices to enable pairing initiation from either device (*Paragraphs 0020-0022 and Paragraph 0031*), while Haller teaches that all system elements possess processor and pairing memories (*Col. 4, Lines 39-63 and Col. 6, Line 5- Col. 7, Line 30*).

With respect to **Claim 28**, Thomas recites:

A first wireless device converting pairing information for a second wireless device into audible signals (*Paragraph 0020 and Fig. 1, Element 12*);

The first wireless device communicating the audible signals to a human (*Paragraph 0020 and Fig. 1, Element 13*);

The subscriber providing inputs corresponding to the audible signals to the second wireless device (*Paragraph 0022 and Fig. 1, Element 5*);

The second wireless device converting the inputs into control signals (*Paragraph 0022 and Fig. 1, Element 15*); and

The second wireless device applying the control signals to effect pairing with the first wireless device (*Paragraph 0022*).

Although Thomas accepts vocal inputs to enable wireless device pairing, further teaches a memory that holds multiple pairing addresses (*Paragraph 0026*), and mentions that his invention can be used with other types of pairing information (*Paragraph 0032*), Thomas does not make a link between a identifying pairing information based upon a hands-free set type and model or specifically teach encryption codes associated with the hands-free set. Haller, however,

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recites a system that pairs wireless devices having processors/memories (*Col. 4, Lines 39-63*) including hand-free set type devices (*for example, elements 107a and 107c, Fig. 1*) (*Abstract, Col. 5, Lines 19-40 and Col. 6, Lines 5-21*). Further, Haller's pairing key includes and is selected for a type (*device model, manufacturer*) and model (*device name, device identification symbol*) of a hands-free set (*Col. 2, Lines 41-51, Col. 6, Lines 65- Col. 7, Line 30*).

Thomas and Haller are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas with the manufacture numbers for hands-free sets taught by Haller in order to efficiently and easily add/remove specific devices from a short distance wireless network (*Haller, Col. 2, Lines 7-10*).

With respect to **Claim 30**, Haller further discloses:

A pairing code specific to the wireless device (*Col. 2, Lines 41-51*).

9. **Claims 3, 8, 11, 16, 19, 22, and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (*U.S. Patent Application Publication: 2002/0065663*) in view of Haller et al and further in view of Willey (U.S. PG Publication: 2003/0065918 A1).

With respect to **Claim 3**, Thomas in view of Haller teaches the system for enabling wireless device pairing via pairing information retrieved based on a type and model of device, as applied to Claim 2. Although Thomas in view of Haller teaches sending data between devices for pairing, the prior art does not specifically teach synchronizing pairing communication acts with pairing outputs, however, Willey recites such synchronization (*Paragraphs 0043-0045; and 0066*).

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Thomas, Haller, and Willey are analogous art because they are from a similar field of endeavor in connecting wireless devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas in view of Haller with the synchronization taught by Willey in order to diminish the threat of a man-in-the-middle attack (*Willey, Paragraph 0042*).

Claim 8 contains subject matter similar to claim 3, and thus, is rejected under similar rationale.

Claims 11, 16, 19, 22, and 24 contain subject matter similar to Claim 3, and thus, are rejected under similar rationale.

10. **Claims 4, 12, and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas et al (*U.S. Patent Application Publication: 2002/0065663*) in view of Haller et al and further in view of Asano et al (U.S. Patent: 7,093,128).

With respect to **Claim 4**, Thomas in view of Haller teaches the system for enabling wireless device pairing via pairing information retrieved based on a type and model of device, as applied to Claim 1. Thomas does not specifically disclose device pairing codes common to a device model, however teaches a pairing code common to all devices within a model group (*Col. 11, Lines 29-36; and Col. 21, Lines 57-65*).

Thomas, Haller, and Asano are analogous art because they are from a similar field of endeavor in device connection. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Thomas in view of Haller with the

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common serial number pairing information taught by Asano in order to maintain interoperability between similar devices (*Asano, Col. 21, Lines 57-65*).

Claims 12 and 29 contains subject matter similar to Claim 4, and thus, is rejected under similar rationale.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See PTO-892.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632.

The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached at (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James S. Wozniak/
Primary Examiner, Art Unit 2626